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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,869

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Martin Israelsson

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EXAMINER

WOO, KUO-KONG

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,869	Applicant(s) ISRAELSSON ET AL.	
	Examiner KUO WOO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Status of the Claims

1. Claims 1-10 have been cancelled. Claims 11-20 have been amended on 1/28/2009 and are currently pending in this office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US-PGPUB 2004/0152453 A1) in view of Meago (US-PGPUB 2004/0223513 A1) and in further view of Ohlsson et al. (US-PGPUB 2002/0068571 A1).

Regarding claim 11, a method for registration of a drift Radio Network Controller (DRNC) said method comprising the steps of: Hayashi discloses "Defining a counter (§30, unit 41 has a function for **counting the number of UEs** which exist in a zone of a cell under control of the RNC and receive an identical service) and a first threshold value" (§40, step S17 that the number of UEs is equal to or more than the **threshold value**, the PtP system is switched to the PtM system in the RB setting unit

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43 (step S19), wherein first threshold value is no MBMS session was set up in the system;

“Using the counter for counting of **a set of power consuming events** (¶ 34, an "RNC ID" for specifying the **moving source RNC**, which receive the MBMS service, by "1") occurring at the drift **radio network control** node “(¶34, a "UE ID" for specifying the **UE 20**, and an "RNC ID" for specifying the moving source RNC;

“Delaying registration (¶39, a threshold value are compared. If the number of UEs is smaller than the threshold value ("Y" in step S17), the PtP system is maintained) and (¶40, the number of UEs is equal to or more than the threshold value, the PtP system is switched to the PtM system in the RB setting unit 43 (step S19), and a message for setup of the RB (radio bearer) for the MBMS service is sent to the UE 20 (step S20) of the drift radio network control node with a core network node until the counter has exceeded the first threshold value” , wherein pending on the threshold level notification (**registration**) is delayed until threshold value reached.

Regarding claim 12, Hayashi discloses” wherein the events occurring at the drift network control node which is counted by the counter is a number (¶ 40, the number of UEs is equal to or more than the threshold value, the PtP system is switched to the PtM system) of user equipment units for which a lur linking procedure is performed for the MBMS session” wherein the PtM is MBMS session.

Regarding claim13, Hayashi discloses “wherein the of events occurring at the drift network control node which is counted by the counter”, However, Hayashi does not

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explicitly disclose “ the counter are time periods elapsed since an lur linking procedure for the MBMS session has been performed for a predetermined user equipment unit”

In an analogous art , Meago discloses “ the counter are time periods elapsed since an lur linking procedure” (§15, the period of interest", in a way that other RT services cannot access those resources) and (§ 46, counting this is the function that UTRAN performs when it wishes to identify the number of multicast subscribers in a particular cell, that wish to receive a multicast session for a particular service), and (§ 59, an MBMS programs is the MBMS service plan defining service availability times and expected characteristics of content, content delivery or data rates over time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Hayashi RNC teaching in invention of Meago provides method to overcome wasting time waiting and drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court's decision in KSR include: Applying a know technique to a known device ready for improvement to yield predictable results.

Regarding claim14, Hayashi discloses “Defining a second threshold value” (§39, If the number of UEs is smaller than the threshold value ("Y" in step S17), the PtP system is maintained, and service data is delivered through a dedicated channel for each UE) wherein second threshold value is small than Y in step S17;

“Delaying deregistration of the drift network control node until the counter has a value below the second threshold value.(§39, an "RB Setup" message is also sent to

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the UE 20 from the RB setting unit 43 of the RNC 5 such that the data is delivered by the PtP system (step S18), and (Since this judgment depends upon the number of UEs, the number of UEs (a counted value of the UE number counting unit 41) and a threshold value are compared) wherein until the second threshold value is reach the system will maintain current MBMS situation which mean delaying deregistration (removal of link).

Regarding claim15, Hayashi discloses “wherein the second value is selected”. However, Hayashi does not explicitly disclose “to provide hysteresis protection”

In an analogous art, Ohlsson discloses “to provide hysteresis protection” (§ 11, a second event (Event 1B) is Radio Link Removal, which occurs when the measured and filtered pilot signal from the destination base station falls below the threshold of Expression) and (§11, certain hysteresis value may be factored into the threshold expression) wherein hysteresis provide the protection of frequency of adding or removal of radio link to network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Hayashi RNC teaching in invention of Ohlsson provides a positive verification result is a condition for proceeding with the handover sequence (see ¶15) to overcome often switching and drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

Rationales for arriving at a conclusion of obviousness suggested by the Supreme Court’s decision in KSR include: Applying a know technique to a known device ready for improvement to yield predictable results

Regarding claim 16, has limitations similar to those treated in the above claim 11 rejection(s), and are met by the references as discussed above.

Regarding claim 17, has limitations similar to those treated in the above claim 12 rejection(s), and are met by the references as discussed above.

Regarding claim 18, has limitations similar to those treated in the above claim 13 rejection(s), and are met by the references as discussed above.

Regarding claim 19, has limitations similar to those treated in the above claim 14 rejection(s), and are met by the references as discussed above.

Regarding claim 20, has limitations similar to those treated in the above claim 15 rejection(s), and are met by the references as discussed above.

Conclusion

4. The prior art are made of records and not relied upon are considered pertinent to applicant's disclosure.

- US-PGB 2004/0157640 A1 to Pirskanen et al describes system and method for counting UE in MBMS as recited in claim 11.
- U.S. US-PGB 2001/0049287 to Plunkett teaches Hysteresis protection in Methods and device for preventing toggling between two zones has similar invention as recited in claim 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on Monday through Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/
Examiner, Art Unit 2617

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617